

CLAIMS

1. A field distribution measuring method for measuring an electric field or a magnetic field by a probe measuring at a plurality of sampling points while continuously sweeping, wherein

a shift amount of the sampling points is computed, based on a spurious spectrum generated by a displacement between a position of the probe and a measuring timing, and a distribution of the electric field or the magnetic field is measured in consideration of the shift amount.

2. A field distribution measuring method according to claim 1, comprising:

storing a plurality of measured data measured by the probe sweeping in a first direction together with position information of the probe as reference data;

storing a plurality of measured data measured by the probe sweeping in a second direction opposite to the first direction together with position information of the probe as adjustment data;

interpolating the adjustment data to compute interpolated data with data between the sampling points interpolated;

computing spatial frequency power spectra for the reference data and the interpolated data; and

computing the shift amount of the sampling points, based on the spatial frequency power spectra.

3. A field distribution measuring method according to claim 2, wherein

the shift amount of the sampling points is computed based on an accumulated value of the spatial frequency power spectra.

4. A field distribution measuring method according to claim 3, wherein

the shift amount of the sampling points is judged, based on a point where the accumulated value of the spatial frequency power spectra is below a prescribed value.

5. A field distribution measuring method according to claim 3 or 4, wherein

the shift amount of the sampling points is judged, based on a point where the accumulated value of the spatial frequency power spectra is minimum.

6. A field distribution measuring method according to any one of claims 1 to 5, wherein

the shift amount of the sampling points is computed in consideration of acceleration and deceleration of the probe.

7. A field distribution measuring method according to any one of claims 1 to 6, wherein

the probe sweeps on a two-dimensional plane.

8. A field distribution measuring method according to any one of claims 1 to 6, wherein

the probe sweep in a three-dimensional space.

9. A field distribution measuring apparatus comprising:

a probe for detecting an electric field or a magnetic field at a plurality of sampling points while continuously sweeping on a plane or in a space;

measuring unit for measuring the electric field or the magnetic field detected by the probe;

storing unit for storing data of the electric field or the magnetic field measured by the measuring unit together with position data of the probe;

data processing unit for computing a shift amount of sampling points generated by a displacement between a position of the probe and a measuring timing, based on data stored in the storing unit; and

computing unit for computing a spatial distribution of

the electric field or the magnetic field detected by the probe, in consideration of the shift amount of the sampling points computed by the data processing unit.

10. A field distribution measuring apparatus according to claim 9, wherein

the data processing unit computes the shift amount of the sampling points, based on a spurious spectrum generated by the displacement between the position of the probe and the measuring timing.